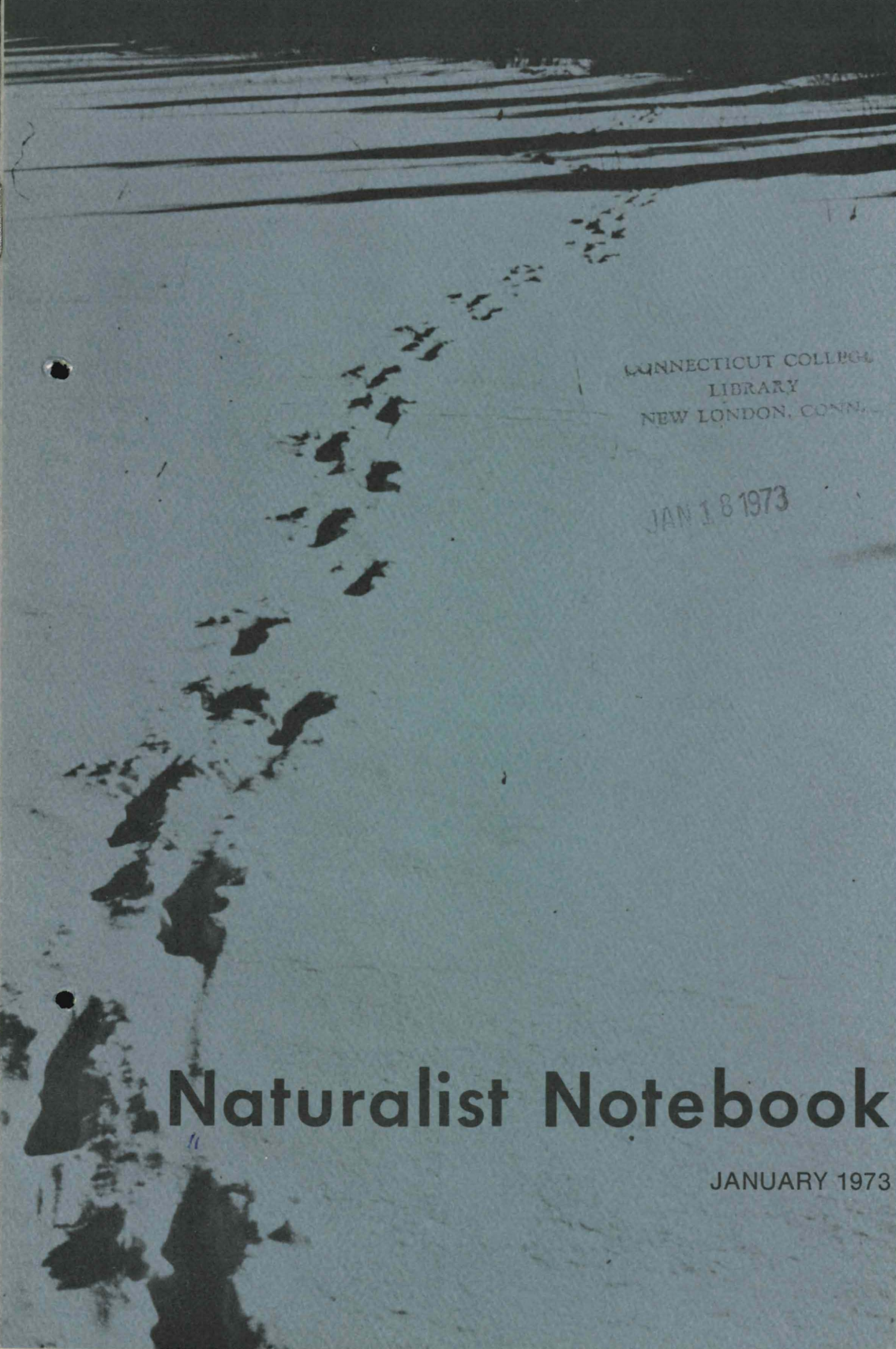

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Naturalist Notebook

JANUARY 1973

Naturalist Notebook

JANUARY 1973 VOLUME 9 NUMBER 1

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Editor: Brenda Golberg Bibb
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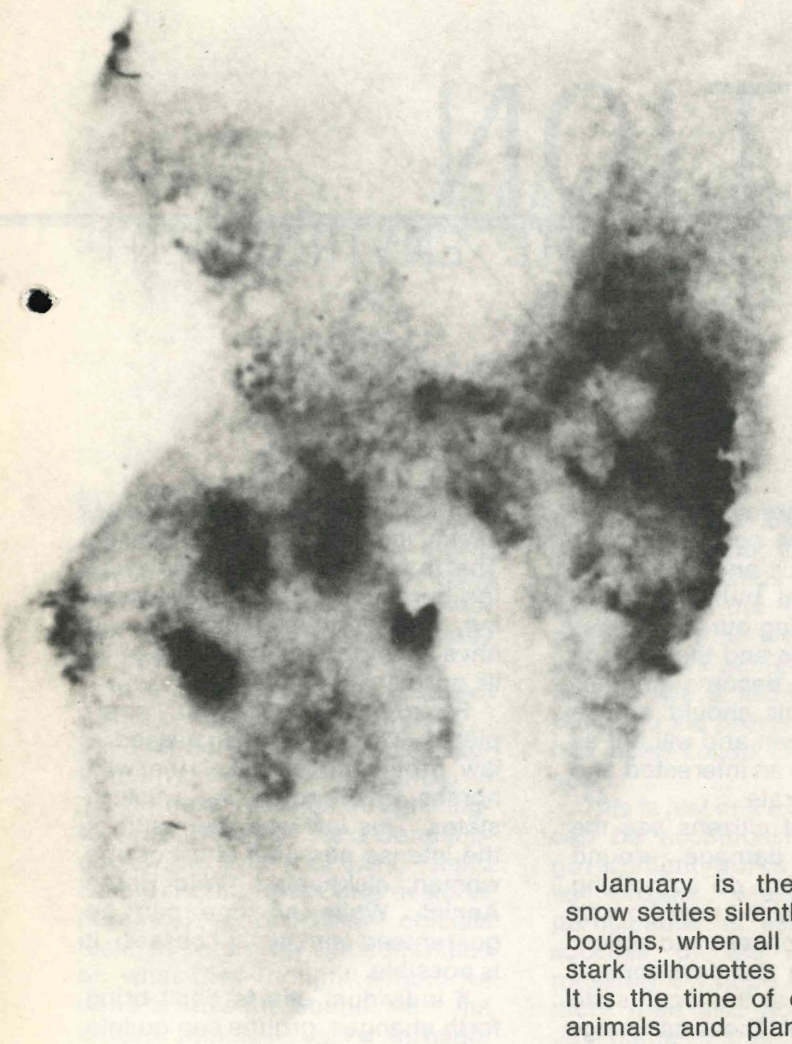

January is the month when snow settles silently on evergreen boughs, when all other trees are stark silhouettes on grey skies. It is the time of quiet for many animals and plants alike, conserving their energy for spring to come. This is the time of year when the naturalist must truly search for action: stories told by tracks in the snow, the promise of winter buds and seeds. January is also the time for searching for another kind of environmental action, in which all of us, as consumers and citizens, act for the environment. Let this January be the month when you join in the search for action!

ACTION

FOR THE ENVIRONMENT

One of the great fears of the men and women concerned with the future of our environment is that the present public enthusiasm for protecting our natural resources will fade and the ecology movement will become another passing fad. This should not be allowed to happen and will not as long as we have an interested and informed electorate.

Thousands of citizens see the environmental damage around them and want to do something about it, but don't know how to translate their concern into action. Issues affecting the environment arise every day at the local, state and federal level. These can range from community land use decisions to state air quality standards to federal legislation controlling ocean drilling. It is important that those citizens interested in such issues be allowed to voice their concern to the appropriate government officials. This can take many forms ranging from attending a zoning board hearing, petitioning the state legislature or writing to their U.S. Senator.

Too often, however, the concerned citizen feels that he or she, as an individual, has no power. That is not true. While dealing with the bureaucracy is often frustrating, a determined individual can have an important impact on public policy.

For example, the recently completed 92nd Congress passed a law protecting many of the wild horses which roam our western states. This law was the result of the intense personal effort of one woman, nicknamed "Wild Horse Annie". While no one can be guaranteed similar successes, it is possible.

If individual efforts don't bring forth changes, groups can go into action. These can either be existing organizations such as the National Wildlife Federation, or ad hoc groups formed for a single specific purpose, such as the preservation of an endangered species or the protection of a piece of land.

Over the past few years Congress and state legislatures have passed hundreds of laws designed to reverse the deterioration of our environment. The credit for

ABRAHAM RIBICOFF

much of this sudden upsurge of activity belongs to those individuals and groups who took the time to study a particular problem, develop solutions and lobby for governmental action.

In my own efforts to preserve the Connecticut environment, I have found local citizen participation invaluable. For instance, in 1970 I held hearings in Washington, D.C. New York, and Connecticut on the future of Long Island Sound. As in most Congressional hearings, government officials testified before my Subcommittee on what they thought should be done to save the Sound. After the official witnesses were through, I opened up the meeting to anyone who wished to speak. The resulting testimony by individual citizens was proof of the deep public concern for and understanding of the problem of the Sound.

As a result of these hearings, a comprehensive three year study of Long Island Sound by the New England River Basin Commission was begun. One of the first actions of the Commission was the establishment of citizen advisory committees and the scheduling of public meetings on their work. By the time the study is completed, the men and women who live and work along the Sound will have made a substantial contribution to the preservation of what has been called the first "urban sea".

This is just one example of what can be accomplished when the government works together with its citizens. Maximum citizen participation is essential to the success of the environmental movement. I hope that more and more men and women will take advantage of their rights and let the government know of their concern and suggestions for solutions.

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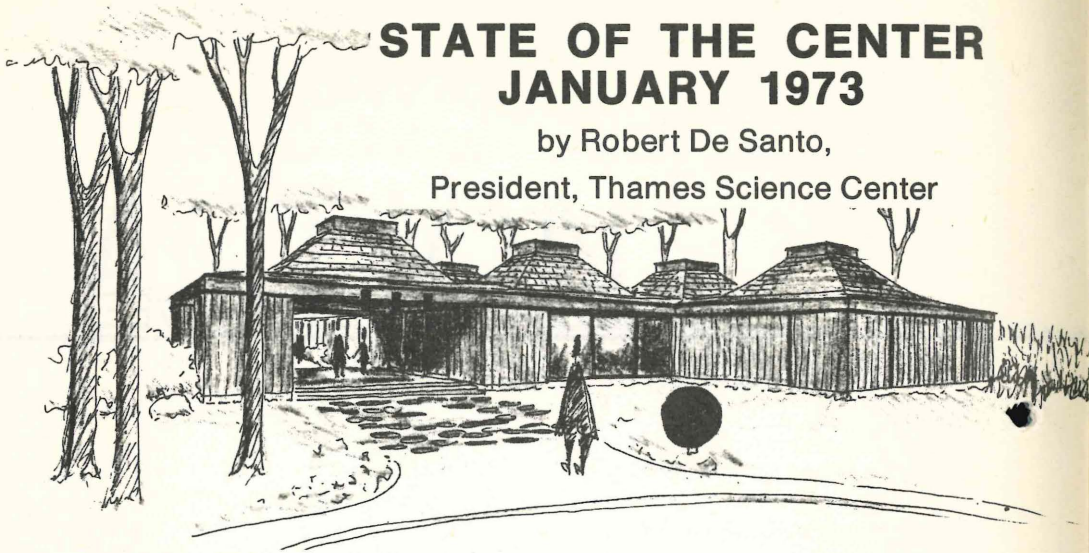
Senator Ribicoff of Connecticut has shown his concern for the quality of the human environment in his distinguished political career, particularly in his campaign for the restoration of the Connecticut River valley.



STATE OF THE CENTER JANUARY 1973

by Robert De Santo,

President, Thames Science Center

As we look forward to the new year, I am pleased to announce to you that we do so from a stable position and with truly exciting prospects.

This has been a year of some uncertainty and considerable change. These events have forced your Executive Board to better define the needs of the Center; to plan specific priorities in meeting these needs; and to play a more active role in the operation of the Center.

One major change has been in the staffing of the Center. Several new members have been added to the staff: Mrs. Agnes Becker as Administrative Secretary, Mrs. Brenda Bibb as Naturalist, and Miss Linda Becker as part-time Clerk-Typist. The presence of Mr. Haeni has provided the needed continuity to the staff during this time.

Another factor in maintaining the stability of the Center has been the priceless contribution of time and effort by so many volunteers. All of their efforts are reflected in the growth and diversity of the Center.

The Museum Shop has been expanded and stocked to capacity for the Christmas season. This has been advertised in the *New London Day* and the *Naturalist Notebook.* Our income from the Museum Shop has shown remarkable growth, primarily through the tireless volunteer efforts of Mrs. Ann Morgan.

The Museum itself has taken on a new look with the installation of our "Living Wall" for display of live animals, and the refinishing of donated display cases. The exciting new wall displays have been maintained by Mrs. Shelley White, another dedicated volunteer.

Our Administrative Secretary has worked steadily in updating our bookkeeping records and other vital functions, with particular emphasis on membership. The systems of recording memberships are improving steadily. Membership now totals 700. Much help is being given by volunteers on a daily basis. With the acquisition of up-to-date equipment in the office the many facets of daily operation are being streamlined.

Through the efforts of our Chief Naturalist, we have added and expanded programs to meet the needs of all age groups. These in-

clude the Young Naturalists for 4 and 5 year olds; additional weekday workshops for elementary and junior high school students; an expanded Junior Curator program for high school students; courses in bird watching, tree and flower identification; Bonsai; household ecology; monthly family nature walks.

Our school field trip program has maintained its great popularity. Its success is in large part due to the volunteer efforts of Mrs. Barbara Kashanski. Our slide programs and other environmental programs also continue to be in demand.

Our Naturalist has worked both on our school programs and in expanding the programs at the Center, as well as taking over as editor of the *Naturalist Notebook.* The *Notebook* has continued to improve under the volunteer editorship of Mrs. Jo Merrill, and can look forward to further development.

This review of our past year's accomplishments allows us to look forward with real anticipation to exciting prospects in 1973. We hope to have an increased number and variety of workshops. Saturday will be "Demonstration Day," with activities for both children and adults to participate in. We are now open Sunday for similar activities. More weekend outings will be scheduled for both adults and children. Our nature trail has been cleared and marked and an explanatory brochure is being prepared. We are initiating an afternoon program for housewives and other adult members beginning in January. The Museum is constantly being upgraded. We anticipate preparation of portable displays to travel to schools, libraries and shopping centers. We are presently investigating means of increasing our advisory role in environmental education investigating means of increasing our role in publications and dissemination of media. Hopefully this activity will go beyond our monthly bulletin.

In addition to focusing on staff roles and objectives, it has been this Administration's wish to clearly define the broader Center function as presented in our constitution. The review of the document has been a major objective and should serve to better define our being.

During the past three years, we have been seen exponential growth of the Center and over the past year the Administration has attempted to define and focus that growth. We have also attempted to bring new people and new ideas into close association with the Center through membership on the Board or through their participation in our programs. I believe this Administration has been successful in supporting and defining our present position and our present goals. It has focused on our needs for further stabilization through close-knit cooperation with our staff.

Our challenge to grow reflects a developing strength and identity which we all are working towards in our support of the Center. That challenge is the essense of our goal of environmental education, and the diverse nature of our membership is the greatest support we have of that goal.

• • •

Dr. De Santo has been President of the Center for one year. A professional marine scientist, he is now Chief Environmental Scientist with C. E. MacGuire Inc., a consulting firm.

FRESH WATER WETLANDS

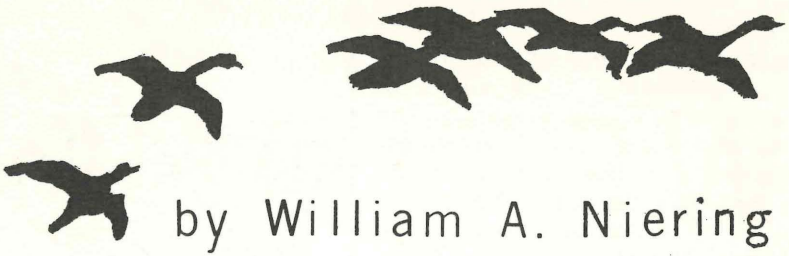
The concerned citizen is the key to the fate of our freshwater wetlands. Will they be filled, dredged and developed? Or will they remain wild: ponds and marshes bordered in cattails and echoing to calls of Black Duck and Bullfrog; Red Maple swamps declaring New England's autumn; peat bogs complete with insectivorous plants?

The wetlands of the United States have been subjected to widespread destruction and abuse. As a result of dredging, filling, draining and pollution we have reduced their acreage by almost half. Only 3.5 per cent of our entire country, they represent an extremely limited but highly productive resource. Although these figures include all wetland types, both freshwater and saline, this article will deal primarily with the fresh water ecosystems.

Wetlands are of major importance in the nation's water regime since they act as storage basins, lower flood crests, minimize erosion and reduce the destructiveness of severe floods. In urban centers this is especially significant since streets and buildings waterproof the land surface and tend to concentrate large volumes of rainfall.

Fresh water marshes and swamps are among our most productive biological systems. They compete with the best agricultural land in total production of sugars. Although we often do not utilize these sugars directly, indirectly they lead to timber or through the food chain to wildlife production. The wetlands have long been recognized as our Nation's duck factories. The pothole country of the prairie states represents only 10 per cent of our wetlands but produces over 50 per cent of our waterfowl.

In the process of photosynthesis, green plants produce oxygen in excess of what they require and therefore give off oxygen to the atmosphere. In recent studies on the Tinicum Marsh in Philadelphia, it was reported that 20 tons of oxygen per day is produced from the 412 acres of marsh. However, since this study, a section of I-95 has been constructed with an interchange in the center of the marsh which will drastically modify this figure. As Dr. Edward S. Deevey has pointed out in an intriguing article, "In Defense of Mud," not all the oxygen produced comes from green plants. In the wetland mud, bacteria produce oxygen as they reduce sul-



by William A. Niering

fur and nitrogen.

One of the most significant roles of wetlands is their ability to remove pollutants. Although it has long been recognized that rivers have a certain "self cleaning" ability, recent studies have documented this extremely important role of marshes and swamps. The Tinicum Marshes mentioned above receive sewage from sewage treatment plants. Studies indicate that within three to five hours after the water had moved across the marsh there was a 57 per cent reduction in BOD (biological oxygen demand), 63 per cent reduction in nitrates, 57 per cent in phosphates. This amounts to a reduction of 7.7 tons of BOD, 4.9 tons phosphate, 4.3 tons ammonia nitrogen, and 138 lbs. nitrate.

Wetlands also serve as outdoor educational exhibits and biological laboratories. They serve as a resource base for scientific research and also as living museums for teaching the dynamics and ecological role of these ecosystems. In these outdoor laboratories one can emphasize certain basic ecological principles - energy flow, diversity, recycling and limited carrying capacity. All of these are directly related to the environmental problems man has created by failing to recognize their applicability to *human* ecology.

Wetlands also provide a great recreational outlet. The Everglades and Corkscrew Swamp in Florida attracts thousands of people each year. Twenty million Americans go fishing and two million hunt waterfowl. Thousands of others hunt the wetlands with binoculars and cameras where an unparalleled diversity of waterfowl and spectacular waterbirds can give pleasure and inspiration. On Staten Island a unique fenway system has been proposed for incorporating the wetlands as part of the open space pattern. Such a mosaic of open space should be incorporated into every community development plan.

FUTURE OUTLOOK

Encroachment is the universal phenomenon. In urban areas sanitary landfill operations, rights-of-way, highways, airports, industrial and housing developments and pollution from sewage and industrial wastes are among the numerous forces leading to wetland destruction. In the Southeast, channelization of river bottomland swamps is a major threat. In the prairie pothole coun-

try 125,000 acres were drained between 1965-1968. Elsewhere one is confronted with strip-mining operations, major dams for flood control and irrigation. The massive water control system established in the Everglades has completely disrupted the natural flow of water southward from Lake Okeechobee. The Everglades National Park lies at the end of this potential source of water where, unfortunately, its long-range fate is still uncertain.

Although our record in wetland preservation has been poor and irreversible damage has already been done, local ordinances are beginning to appear to protect this resource from future encroachment.

Only when we begin to look at the environment holistically and begin to arrest those individual actions that have an impact on a larger ecological system will progress really be made. Obviously a National Wetlands Policy is necessary in order to establish guidelines for wetland usage. This will have to be coupled with a massive educational program in order to make our citizenry truly aware of the value of these liquid assets with which our Nation has been endowed.

• • •

Dr. Niering is an internationally recognized authority on wetlands conservation. He is Professor of Botany and Director of the Connecticut Arboretum at Connecticut College, New London, and a member of The Thames Science Center Board of Directors.

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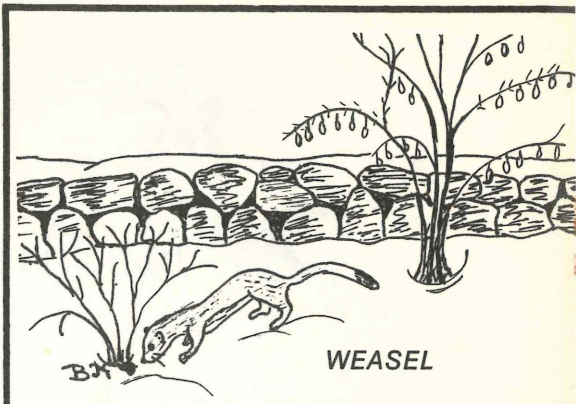
This article has been condensed with the author's permission from "Fresh Water Wetlands" by W. A. Niering in *Ecology Today* (May/June 1972).



WEASEL

Right outside there's plenty of action, even though it is cold, snowy, January, and lakes, ponds, and streams are frozen. The quickest way to find the action is to check the snow-covered ground. You are probably familiar with the tracks of rabbits, squirrels, fox, and deer. But do you know that there is a family of carnivores (meat eaters) who are active here all winter? It is the weasel family, and the members of this family are action plus! Weasels, minks, otters, and skunks are all members of the family Mustelidae. They usually have long slender bodies, short legs, short rounded ears and anal scent glands. The skunk is the only member that doesn't follow the typical body shape. He makes up for this discrepancy by having the most powerful scent glands. It is the lovely mink I would like to focus on: not only is it my favorite, but it is the "weasel" you will most likely see (if only his tracks!)

Last winter my family and I had the excitement of seeing a mink right outside our window in East Haddam, after a beautiful soft but fairly deep snow storm. I was cooking breakfast when suddenly came shouts from one of my budding female naturalist, of "weasel, otter, mink, or something: come quickly!" A dash to the win-

WHERE THE ACTION IS

by Barbara Kashanski

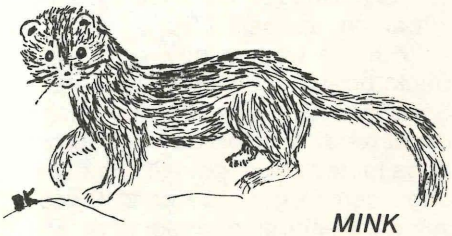
dow rapidly narrowed the choice down to mink. There, staring at us over a mound of fresh snow, was a beautiful dark brown little face with a white spot on its chin. Realizing it had been discovered, the mink seemed to vanish in thin air. We hurriedly pulled on boots, grabbed cameras, and raced out to see if we might get another glimpse of this beautiful creature, so sought after for his magnificent coat. We picked up the tracks and followed them until they disappeared under a very large prickly spreading field juniper. So ended the chase.

We had a good chance to study the freshly made tracks. We were amazed at the distance between bounds, up to four feet, although usually about two feet. All four feet seemed to land in the same spot. Because of the depth of the snow there was a line between footprints where its stomach had touched the snow. Even if we hadn't seen the animal itself, we would have known from the tracks alone that it was a mink. Mink footprints are larger than a weasel's and the distance between prints is larger.

Weasels are rarely seen although they are around. They are smaller than mink: a male weasel is 13 to 16 inches, a male mink is 20 to 26 inches (including the tail in both cases). The females are smaller by 2 or 3 inches. To me, weasels look a lot more streamlined than mink. Maybe it's their smaller size which enables them to weave through stone walls hunting chipmunks, and down holes after mice and moles. In the winter, in the northern part of its range, the weasel turns white except for the tip of its tail which stays black. These coats are sold as ermine. In summer, weasels are brown on the back with yellowish white underneath and a black tip on the tail. Mink stay brown all year.

The mink is the most versatile of the weasel family. It is a good swimmer and diver, yet is quite at home on land. It can even climb trees! Mink make dens in the banks of streams only to raise their families. Mink are restless little animals, known to travel many miles a day. They like to be near some form of water, for their favorite foods are crayfish, mussels, frogs, fish, and other aquatic life. So marshes and streams are good places to look for mink. Mice, young rabbits, chipmunks, birds, and sometimes muskrat fall prey to the hungry mink.

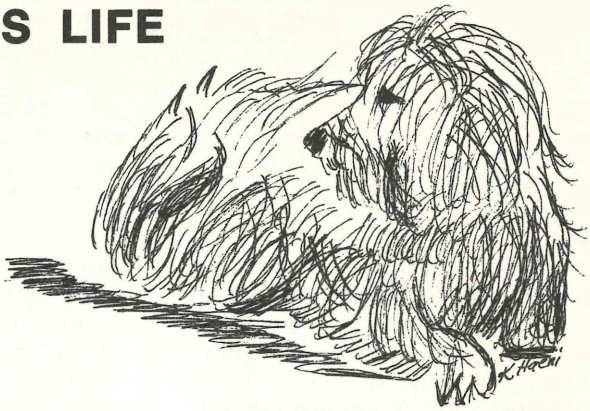
I hope some of you will have a chance to meet this beautiful little mammal. Don't expect to meet him by sitting in the house: we were just lucky! You will have to get out where the action is!



MINK

IT'S A DOG'S LIFE

by Kathie Y. Haeni



When people say, "It's a dog's life," they usually mean that it's a relatively easy life. However, life in a city is not easy for a dog or a man. Dr. Alan Beck, a biologist, is studying the behavior of *feral* (domestic animals gone wild) dogs in the city of Baltimore, Maryland. Here is a typical day in the life of two dogs, Shag and Dobe, from the notebook of Dr. Beck:

"2 Sept. 1970, 4:20 a.m. – No signs, garbage behind homesite from previous day now gone – probably collected. I will now wait for Shag, who I suspect is still in the shrubbery.

4:50 a.m. – Barking now becoming apparent. The area is coming alive, still no sign of Shag.

5:22 a.m. – Other dogs now apparent, still no sign of Shag.

6:00 a.m. – Shag and a Doberman, Shag's constant companion, appear."

With the waiting now over, Dr. Beck began to follow the dogs. Shag and Dobe headed for their usual feeding alley. Several other dogs joined them, going from garbage can to garbage can. It was still dark enough to observe some rat activity. Dogs, cat and rats all seemed to ignore each other, sometimes eating within a foot of each other.

"6:20 a.m. – Shag and Dobe return to their homesite, where, as usual, they find water under the air conditioner unit.

7:10 a.m. – Shag finds a garbage can on its side and pulls out wrappings frequently used for takeout orders. He eats what appears to be a portion of spaghetti and bread.

7:52 a.m. – A human whistle is heard. The dogs immediately run to the building they had been watching, where a woman drops food to them.

8:43 a.m. – The dogs enter shrubbery at homesite and after changing positions several times, settle down to sleep at 10:20 a.m."

Dr. Beck continued his observations for several weeks, but was upset when he realized that Shag and Dobe had disappeared. After several visits to animal shelters and dog pounds without finding them, he feared that the dogs had been killed by cars, a frequent cause of death among city dogs. In 1971, 17,000 dogs were killed

by cars in the city of Baltimore.

After six weeks, Dr. Beck saw a man walking Shag on a leash. He had taken in both dogs and given them a home. Shag and Dobe's story had a happy ending, but they are just two of several thousand dogs that roam our large cities.

In this age of citizen concern and action we can not sit idly by and let man's best friend become man's worst enemy.

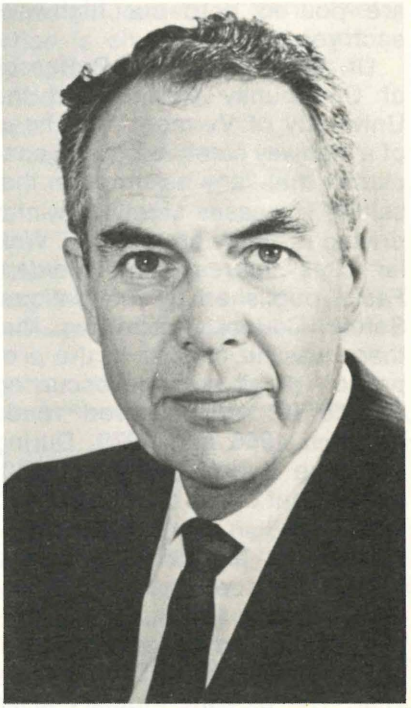
City dogs and cats are in the midst of a population explosion. 10,000 dogs and cats are born every hour. In cities all over the world, dogs are increasing more rapidly than people. The increase in numbers means an increase in dog pollution — tipped-over garbage cans that attract rats; dog manure that attracts houseflies and rats and can lead to some serious human diseases.

To combat these problems we should follow some suggestions made by Dr. Beck. Dog numbers can be controlled by offering free spaying service for anyone's dog. Leash laws would keep dogs supervised so they do not spread garbage around, and strong health laws might require owners to clean up their dogs' wastes.

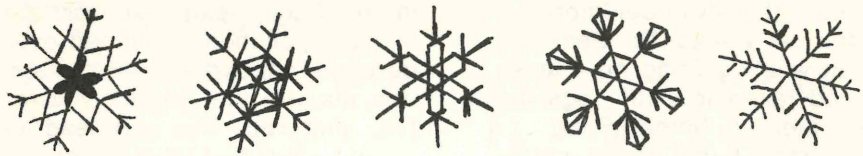
With these suggestions we can truly make every dog's life, "a dog's life!"

AUDUBON WILDLIFE FILM

Sunday
January 28, 1973
Harry Pederson
"The Bahamas Top to Bottom"



After an interesting tour of the delectable Bahama Islands, Harry Pederson plunges into their sparkling blue-green waters to enthrall his audiences with a film-story of undersea life. Octopuses squabble over tasty crabs; a lobster finds food with the hair on its legs; a barracuda gives a diver the jitters. A searchlight invading the depths at night causes mass confusion among the fish. This is an unforgettable film - presented with an informative and humorous narrative.



WITH A GRAIN OF SALT

by Frank R. Haeni

As the new year brings our first deep snowfall, we face growing damages caused by chemicals used for removing snow and ice from wintry streets. The chemicals involved are sodium chloride (common salt) and calcium chloride.

Before 1940, sand or cinders were used where necessary to make roads passable. The use of salt since that time has skyrocketed. In 1960, 1.4 million tons of salt were used on highways. Today, more than six million tons of salt are poured onto our highways each year.

Dr. Julian A. Waller, Professor of Community Medicine at the University of Vermont, and head of a highway safety program, concludes that "any assumption that salting increases safety in winter driving is highly premature." Waller cites figures from *Accident Facts,* published by the National Safety Council), reporting that there was no change in the proportion of all crashes occurring on ice or snow-covered roads between 1956 and 1970. During this time period (1960 to 1970) the amount of salt used increased four times.

Consider the damage caused by salt each year. Salt shortens the life of any shoes worn without protective coverings, costing each of us from $2.00 to $20.00 every year. The pipeline industry loses six hundred million dollars annually from corrosion plus corrosion prevention. Decreased property values caused by salt in Newton, Massachusetts, add up to $100,000 annually.

The biggest tab for damages is being picked up by automobile owners. In 1968, the Society of Automotive Engineers estimated that the private car owner pays $100.00 a year for rust protection. In 1971, The Environmental Protection Agency estimated that calcium and sodium chloride cause five hundred million dollars in tailpipe and muffler corrosion each winter.

What effects do these salts have on the environment? Various plants, trees, and grasses are slowly being killed by deicing salts.

The concentration of chloride ions entering in our aquatic ecosystems is of major concern. All the calcium and sodium chloride put on streets eventually flows into streams, lakes, river and seeps down into ground water supplies, rendering many of them impotable. A six-year study conducted in Maine found that, of 100 wells alongside major highways, nearly one-fifth exceeded the Public Health Standards for potable water supplies. Many others approached the upper limit of acceptability. The average annual application of deicing salt in the

area studied was 25 tons per mile, not an overly high figure.

In 1970 a team of scientists, working for the National cooperative Highway Research Program and National Academy of Sciences, diagnosed a number of cases of salt poisoning in wild rabbits, pheasants, a quail and a pigeon. The researchers concluded that heavy snows and cold weather compounded the problem by creating "salt hunger" and restricting water intake by the animals.

Salt pollution is also partially responsible for fish kills, either by creating local toxic conditions or bringing about situations which result in a decrease in oxygen.

One alternative to using salt is to use dust-free granite grit. This method is being used in the Italian and Swiss Alps.

We must act to change our deicing policy now. The environment cannot withstand the continued pressures of man's short-sightedness.

Artists and Photographers:

We need your help! We *badly* need glossy black and white photographs and black and white drawings for the *Naturalist Notebook.* If you have time and talent (even a little bit!), contact Mrs. Bibb at 442-0391.

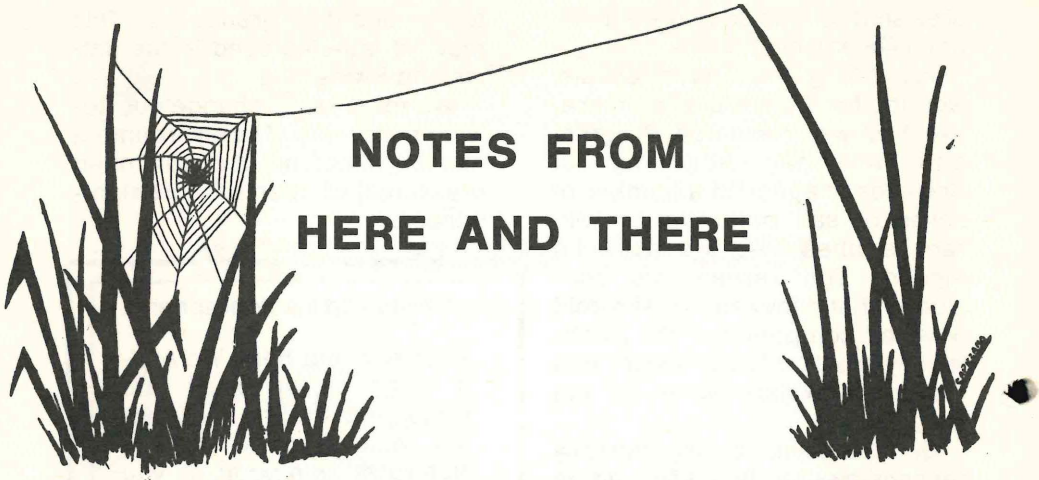
TREE CHIPPING

Your used Christmas tree can be utilized to make wood chips for mulch or use on trails, etc. We have arranged to collect trees for chipping at the Thames Science Center until January 8, 1973. The Department of Environmental Protection is also collecting trees. Please bring your trees to one of the collection areas below:

Thames Science Center - New London
Black Rock State Park - Thomaston
Hammonasset Beach State Park - Madison
Indian Well State Park - Shelton
Penwood State Park - Bloomfield
Rocky Neck State Park - East Lyme
Sherwood Island State Park - Westport
Wharton Brook State Park - Wallingford.

ANNUAL DINNER MEETING
JANUARY 24, 1973

All members are invited to this important event, to be held at 6:30 PM in the Dining Room of the Golden Cup of the Groton Motor Inn in Groton, Connecticut. The program begins with cocktails, and continues with dinner, the Annual Meeting, and an exciting illustrated talk by Tom Hatfield of Mitchell College. His talk will be on Camping in Iceland.



NOTES FROM HERE AND THERE

PAPER DRIVE: The Junior Curators are continuing their highly successful paper drives. Please bring your *bundled* magazines and newspapers to the Thames Science Center on Saturday, January 13.

THIRD ANNUAL GIVING: The Third Annual Giving campaign is underway. We need your active support in order to continue our programs in enviornmental education in Southeastern Connecticut.

ENDOWMENT FUNDS: We wish to thank Dr. and Mrs. R. Goodwin for the fifty shares of stock in Baxter Laboratories which they presented to the Thames Science Center as the beginning of an endowment fund.

HELP!: The garage roof at the Peace Sanctuary Preserve needs some minor repair work done on it. Can you help? Please let us know at 442-0391 if you can volunteer your services for this project.

SNOWSHOEING TRIP: The Thames Science Center is again sponsoring a snowshoeing trip to the White Mountains of New Hampshire. The trip will be February 9-11.

LIVING WALL: If you haven't been to the Science Center recently, you will find several new features. Shelley White has prepared exciting new wall displays on how animals spend the winter. Our new display cases are filling up. Our new "Living Wall," designed by the architect of the Center, William Riddle, has been set up with live displays. We thank both Mrs. White and Mr. Riddle for their volunteer efforts.

WHAT'S AHEAD FOR OUR PUBLIC LANDS?: A review of the national debate over public land use is available from the National Resources Council of America, 1025 Connecticut Avenue NW; Washington, D.C. 20036. Cost is $2.50 for paperback and $3.50 for hardcover.

IT TOOK HIM TEN YEARS, but Smokey the (commercialized) Bear has become a millionaire. It has been reported that at least one million dollars in royalties and fees have been collected for the use of his name on commercial products such as dolls, trays, games, puzzles, and books.

NEW TOWN is an environmental game of town planning which pits ecology against greed as

players seek to build a new community. The winner amasses the most money, but the real goal is establishing a pleasant rewarding community in which to live and work—two often mutually incompatible ends. Four to sixteen players (high school age and up) learn why towns get messed up and why it's so difficult to get them straightened out again. Playable in 1-3 hours, *New Town* comes complete with all sorts of buildings, money, instructor's manual, and other equipment. Available from Harwell Associates, Inc., Box 95, Convent Station, New Jersey 07961; $12.00.

AN OIL LEAK at an Alaskan pipeline construction site went undetected for 18 months, probably damaging one of the state's fishery resources, according to Rep. Les Aspin (Democrat, of Wisconsin). Aspin, in a letter to Interior Secretary Rogers Morton, said the leak raises grave questions about the Trans-Alaskan pipeline itself. "If the Interior Department can't even correct a relatively minor spill in one of Alaska's campsites before construction . . .how is it going to prevent much larger, potentially catastrophic spills from occuring?"

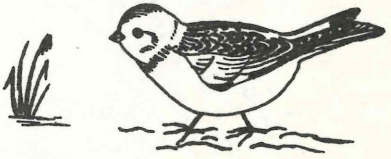
BIRDS ARE NOT ONLY LONG DISTANCE TRAVELERS. Recently a Monarch butterfly that was wing-tagged in Toronto, Canada, was found alive in Salem, Oregon, a distance of over 3,000 miles. Small paper tags bearing the name and address of the individual who tagged the insect were affixed to the wings to trace the butterfly's movements.

AN UPDATED *DIRECTORY OF ENVIRONMENTAL CONSULTANTS* for the United States has been compiled by Bill Cate, and is available from P.O. Box 8002, University Station, St. Louis, Missouri 63108.

THE STATE OF ALASKA has sued the Interior Department over land withdrawals under the Alaska Native Claims Settlement Act. Recent announcement of the agreement bodes ill for several areas which conservationists had hoped would be preserved and which now will be returned to an exploitation-minded state. Among these are the lower Alatna Valley, the proposed Gates of the Arctic National Park, and the Lake Chalatna area. Write your Congressman and tell him to push to put these areas in our national park expansion plans.

THAMES SCIENCE CENTER MUSEUM SHOP

For the Birds:
Seed, feeders, suet bags.
For Bird Lovers:
Bird records, bird books, bird calendars, birder's diary and life list.



FIELD NOTES
NOVEMBER 1972

New London, Waterford: Six COMMON LOONS were seen along the Waterford Coastline November 1. Also seen on the same day was a TREE SPARROW. A VESPER SPARROW was seen on November 3. Two BLACK-BELLIED PLOVERS were found along the shore November 4. November 7, Election Day, was not a very interesting day for birders either. Two WINTER WRENS were found in Waterford, and two EASTERN BLUEBIRDS were seen at Thames Science Center. Other Waterford bird sightings included: A late BLUE-GRAY GNATCATCHER on November 12, four PURPLE SANDERLINGS and eight PIPITS, November 17; one WOODDUCK and twelve GADWALLS, November 19.

Old Lyme, Old Saybrook regions: A rare immature GOLDEN EAGLE was sighted in Otter Cove, Old Saybrook, November 6, and was there as late as November 9. Birding in the Old Lyme area, on November 9, was very rewarding, yielding three WINTER WRENS, a YELLOWTHROAT, a late BALTIMORE ORIOLE, and a CHIPPING SPARROW. Other observations included 20 RED CROSSBILLS and six PINESISKINS. Watch to see if we have a large build-up of these birds again this year. A late PIPING PLOVER was found in Old Lyme, November 12.

Rhode Island Shoreline: The rare WHITE-FRONTED GOOSE was still at Moonstone Beach, November 5. Two IPSWICH SPARROWS were also sighted on this date.

Contributors: G. Bissel, F. Haeni, K. Haeni, B. Burt, Mrs. C. Chapin.

Bird banding at the Peace Sanctuary Preserve was very active in November. The following new birds were captured and banded there:

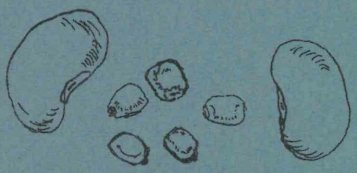
- Slate-colored Junco - 38
- White-breasted Nuthatch - 1
- Blue Jay - 5
- Downy Woodpecker - 1
- Black-capped Chickadee - 2

Only one bird banding session was held at the Thames Science Center in New London. The following birds were banded:

- Blue Jay - 6
- Slate-colored Junco - 2
- White-breasted Nuthatch - 1
- Cardinal - 1

ACTION-PACKED SEEDS:

A PROJECT:



To make lima beans or dried corn sprout, you soak them overnight in water. The next step is to press them against the insides of a glass, then cut a blotter to the size of the glass (or almost), and line the glass with it. Moisten the blotter and keep some water in the glass to the lower half-inch of the blotter. In a few days you will see

some action! The bean has split in two with the lower part of the stem, or hypocotyl, growing downward as a root, and the upper part, or stem, growing upward. The two halves, or cotyledons, which contain the food for the seed, spread apart, and turn green. These will gradually shrivel up as the green leaves develop to make their own food.

To start the corn growing, do as you did the beans—but you will notice: as the corn sprouts, the seed stays in place instead of splitting in two. Food for the corn is stored in the endosperm, as the corn seed has only one cotyledon.

Lots of action in this glass!

—by Shelley White

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